

variable-conductance material [sensors], and for outputting from said [emitter] controller, data representative of the immediate value,

[whereby said improved remote controller is manufactured for outputting data representative of the depressive pressure applied to said one of the depressible buttons.

30. A method of manufacturing ~~an improved~~ hand-held remote controller according to claim ~~11~~ further including providing means for outputting from said [emitter] controller, data representative of the immediate value as a tuner change and rate of change signal.

31. A method of manufacturing ~~an improved~~ hand-held remote controller according to claim ~~11~~ further including providing means for outputting from said [emitter] controller, data representative of the immediate value as a video play speed signal.

#### REMARKS

Claims 1-31 as above presented are all allowable over the prior art of record at least for the following reasons.

The primary prior art disclosure relied upon in the first Office Action is Thorne et al. Thorne et al do not only fail to suggest or anticipate the claimed invention, but clearly teach away from the present invention rather than toward the invention. The present invention is centered around the use of analog output pressure sensitive variable-conductance sensors, or sensors containing analog material which are capable of outputting at least three readable states or values which are an analog output from a material which when placed under varying pressure varies its electrical conductivity. This is precisely what Thorne et al do not want and spent substantial effort in their writing to convince the reader to use only On/Off switches / contacts. While Thorne et al in col. 5 lines 5-9 is describing how other

On/Off (normally closed switches, switches other than the normally open contact switches stated as preferred by Thorne et al) can also be used, they include an example of another type of "switch" stated as being "variable resistance switches". Since Thorne et al clearly do not want any analog sensors, and do not want any analog whatsoever, and because they do not want variable resistors, and further because Thorne et al do not describe how to specifically use or connect the "variable resistance switches", only one conclusion can be reasonably drawn from the Thorne et al disclosure as a whole, and that is that the "variable resistance switches" would be read in the Thorne device as either On or Off, i.e. having only two readable states or read as having only two states, again On or Off. There is substantial evidence in the Thorne et al disclosure of this clear teaching away from using any type of "plurality of switches" or single switch read as having more than two states or On / Off state. It is very clear that Thorne et al are firmly for digital and firmly against analog outputs from sensors. The evidence is first with the using of a "plurality of switches" wherein they are clearly individually read as either in an On or Off state, whether the switch contacts are open or closed (see Thorne et al Abstract in the least), and this is clear throughout the entire Thorne et al disclosure. Next, in the "Background of the Invention", Thorne et al provide very negative comments regarding analog to digital converters, variable capacitive sensors and resistive sensors, see Thorne et al col. 1 lines 40-54; col. 2 lines 1-10. Also see Thorne et al col. 2 lines 62 onto col. 3 lines 1-2 and wherein it is most significantly stated "because the present thumbpad is completely digital in nature".

Also see Thorne et al col. 7 lines 22-31 wherein it is clearly stated that while a joystick might be used in or as the Thorne et al device, the variable resistors of the joystick would first need to be replaced with the "plurality of switches", statements by Thorne et al clearly further indicating that the last thing they want in their device is some analog output sensor

or switch for the numerous reasons provided in their disclosure.

As In the Thorne et al device, the closing or opening of a On/Off switch, and reading it as either On or Off only, wherein a first On/Off switch is used for a first digital signal On or Off, and a second On/Off switch is used for a second digital signal, again only read as On or Off, and third and fourth On/Off switches, etc. are used for third and fourth digital signals, still again the switches only read as On or Off, is a substantially different structural arrangement from the present invention.

It is abundantly clear that the individual switches "plurality of switches" in Thorne et al are read as On or Off, or open or closed in order to meet the "completely digital in nature" of the Thorne et al device. This aspect of the Thorne et al disclosure is of very substantial importance when ascertaining if Thorne et al suggests toward or away from the present invention. This aspect of the Thorne et al disclosure is of very substantial importance when ascertaining if Thorne et al can be properly and reasonably combined with one or more other prior art documents which possibly include pressure-sensitive variable-conductance analog material for outputting at least three readable states (in the least), to then be reasonably and fairly said to suggest the present claimed invention. Applicant believes that the teaching away from using analog material is such a strong teaching away from in the Thorne et al disclosure that Thorne cannot be fairly combined with teachings for using analog output individual sensors as in the present claims.

Thorne et al clearly and strongly state or imply to those skilled in the art that if he (the one skilled in the art) uses analog devices, he will be sorry. See "Background of the Invention" in Thorne et al where they provide very negative comments regarding analog to digital converters, variable capacitive sensors and resistive sensors, see Thorne et al col. 1 lines 40-54. Also see Thorne et al col. 2 lines 1-10. Also see Thorne et al col. 7 lines 22-31 wherein it is clearly stated that

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while a joystick might be used in or as the Thorne et al device, the variable resistors of the joystick would first need to be replaced with the "plurality of switches", again indicating a teaching away from analog to those skilled in the art. In other words, the Thorne et al disclosure teaches one skilled in the art to NOT use analog sensors in a hand held remote control device.

Martinelli et al describe a touchpad having little to do with the present invention. Sellers describes an analog sensor with a function switch based duration on a computer keyboard. Sellers does not describe the structural combination or methodology of the present invention. Nor does Sellers describe any means or suggestion for variably scrolling through available channel numbers or variable controlling of video play speed on a hand-held remote controller.

Therefore, the combination of Thorne et al with Martinelli and further with Sellers can not be said to suggest the instant invention. It is a non-suggestive combination of prior art because the prior art itself (Thorne, Martinelli and Sellers) does not lead one of ordinary skill to make such a combination and find any suggestion therein of the present invention. The very clear and strong teaching away in Thorne et al from Applicant's invention renders it practically impossible to properly and effectively argue that Thorne et al suggest the present invention, or that the Thorne et al disclosure can be combined with other disclosures such as that of Martinelli and or Sellers to suggest or anticipate the present invention.

Thus, all the present claims are firmly believed allowable over Thorne, Martinelli and Sellers (all prior art known to Applicant) individually or in combination, and therefore it is respectfully requested all claims as amended and presented be allowed.

Applicant believes all of the claims are allowable over the prior art of record, and requests the claims be held allowable

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over the prior art.

Additionally, again Applicant wishes to draw the Examiner's attention to the fact that the three applications of Applicant's listed in the Information Disclosure Statement originally submitted with the present application filing have all been approved for issuance. The applications are: 1) "GAME CONTROLLER WITH ANALOG PRESSURE SENSOR(S)" filed Oct. 1, 1997, serial number 08/942,450;

2) "VARIABLE-CONDUCTANCE SENSOR" filed June 29, 1998, serial number 09/106,825 now U.S. Patent 5,999,084; and

3) "VARIABLE-CONDUCTANCE SENSOR WITH ELASTOMERIC DOME-CAP" filed on July 24, 1998, serial number 09/122,269.

The inventions of my three above listed allowed or issued U.S. applications are related, maybe closely related, to the present claimed invention, and therefore I am very concerned about the issue of Double patenting between the present claims and those of my earlier disclosures. The Examiner is requested to review the three above listed patents and or applications for determining Double Patent and also for seeing the clear indication of patentability of the present invention provided by my earlier allowed related application claims. The Examiner is respectfully requested to consider the indication of patentability provided by Applicant's earlier patent applications, and also assist in determining as to whether a Terminal Disclaimer or the claiming of the benefit of one of the earlier filing dates is going to be necessary to render the present application properly allowable. Applicant is quite willing to submit a Terminal Disclosure if it appears proper. Thank you.

Also, the present application, invention and resulting patent rights are now Assigned to "ANASCAPE", the same Assignee of the above three other disclosures of Applicant's. Therefore Applicant has attached a small entity declaration pertaining to

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the small entity status of the Assignee.

Attachments:

- 1) Small entity declaration for Assignee
- 2) Calculation sheet for additional claims
- 3) A check in the amount of \$99.00 for the additional claims fee.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully,


 27 June 2000  
Brad A. Armstrong, Inventor / Applicant

CERTIFICATE OF EXPRESS MAILING

Assistant Commissioner for Patents  
Washington, D. C. 20231

I hereby certify that this complete response to the 05/24/00 Office Action on Patent application No. 09/148,806 is being deposited with the United States Postal Service as EXPRESS mail article # EE841213506US with sufficient postage pre-paid in an envelope addressed to: Assistant Commissioner for Patents, Washington, D. C. 20231, on this

date: June 27, 2000

Signature:   
Brad A. Armstrong, Inventor / Applicant